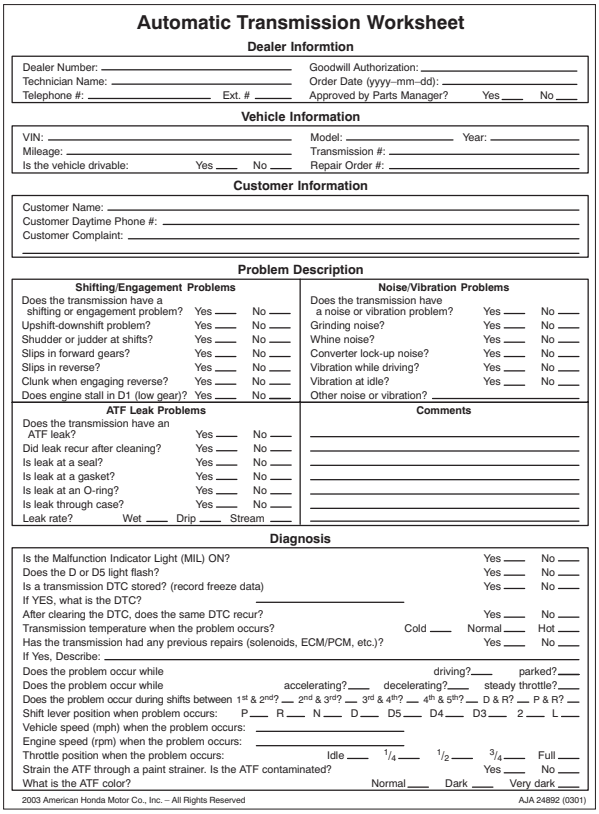
HONDA ServiceNews February 2005

Take the Automatic Transmission Worksheet on Your Test-Drive

When you're test-driving a vehicle for an A/T problem, make sure you take along a copy of the Automatic Transmission Worksheet. This way you can fill it out as things happen and while everything is still fresh in your mind.

You'll find this worksheet on ISIS. To print yourself a copy, do this:

1. From the *i*N main menu, click on **SERVICE**.
2. Click on **ISIS (Service Publications)**.
3. Click on **SEARCH BY PUBLICATION**.
4. Click on **Job Aids**.
5. Click on **Automatic Transmission Worksheet**, and then click on the printer icon.



Automatic Transmission Worksheet

Dealer Informtion

Dealer Number: _____ Goodwill Authorization: _____
Technician Name: _____ Order Date (yyyy–mm–dd): _____
Telephone #: _____ Ext. # _____ Approved by Parts Manager? Yes ___ No ___

Vehicle Information

VIN: _____ Model: _____ Year: _____
Mileage: _____ Transmission #: _____
Is the vehicle drivable: Yes ___ No ___ Repair Order #: _____

Customer Information

Customer Name: _____
Customer Daytime Phone #: _____
Customer Complaint: _____

Problem Description

Shifting/Engagement Problems

Does the transmission have a shifting or engagement problem? Yes ___ No ___
Upshift-downshift problem? Yes ___ No ___
Shudder or judder at shifts? Yes ___ No ___
Slips in forward gears? Yes ___ No ___
Slips in reverse? Yes ___ No ___
Clunk when engaging reverse? Yes ___ No ___
Does engine stall in D1 (low gear)? Yes ___ No ___

Noise/Vibration Problems

Does the transmission have a noise or vibration problem? Yes ___ No ___
Grinding noise? Yes ___ No ___
Whine noise? Yes ___ No ___
Converter lock-up noise? Yes ___ No ___
Vibration while driving? Yes ___ No ___
Vibration at idle? Yes ___ No ___
Other noise or vibration? _____

ATF Leak Problems

Does the transmission have an ATF leak? Yes ___ No ___
Did leak recur after cleaning? Yes ___ No ___
Is leak at a seal? Yes ___ No ___
Is leak at a gasket? Yes ___ No ___
Is leak at an O-ring? Yes ___ No ___
Is leak through case? Yes ___ No ___
Leak rate? Wet ___ Drip ___ Stream ___

Comments

_____
_____
_____
_____
_____
_____

Diagnosis

Is the Malfunction Indicator Light (MIL) ON? Yes ___ No ___
Does the D or D5 light flash? Yes ___ No ___
Is a transmission DTC stored? (record freeze data) Yes ___ No ___
If YES, what is the DTC? _____
After clearing the DTC, does the same DTC recur? Yes ___ No ___
Transmission temperature when the problem occurs? Cold ___ Normal ___ Hot ___
Has the transmission had any previous repairs (solenoids, ECM/PCM, etc.)? Yes ___ No ___
If Yes, Describe: _____
Does the problem occur while driving?___ parked?___
Does the problem occur while accelerating?___ decelerating?___ steady throttle?___
Does the problem occur during shifts between 1st & 2nd? ___ 2nd & 3rd? ___ 3rd & 4th? ___ 4th & 5th? ___ D & R? ___ P & R? ___
Shift lever position when problem occurs: P___ R___ N___ D___ D5___ D4___ D3___ 2___ L___
Vehicle speed (mph) when the problem occurs: _____
Engine speed (rpm) when the problem occurs: _____
Throttle position when the problem occurs: Idle___ 1/4___ 1/2___ 3/4___ Full___
Strain the ATF through a paint strainer. Is the ATF contaminated? Yes ___ No ___
What is the ATF color? Normal___ Dark___ Very dark___

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If you're replacing the A/T, you need this info to properly fill out the Warranty Automatic Transmission Order form on the *i*N workstation.

If the yes/no questions under **Problem Description** don't describe what you're seeing, then use the **Comments** box instead. Often a completed comment can spare you a call from the RPO Tech Line and a delay in the delivery of your reman A/T.

This info is critical to the reman process. In fact, so much so, there's a **$50** service charge if you submit the order form without all the required fields properly filled in.

When you return the failed A/T core to the reman center, the info on the order form, along with the used paint strainer, helps determine which parts need to be replaced when the core gets redone. Everything you do to help the reman center eliminates guesswork and greatly improves the quality of the reman A/T. For example:

- If you replaced the failed A/T for an ATF leak, the inspectors will carefully examine the area of the leak. You can really help out these folks by making sure you mark the leak area with a felt-tip pen.
- If you replaced the failed A/T because all the forward gears were noisy, the inspectors will focus their attention on the final drive gears and may replace those gears whether they look good or not. If only one gear was noisy, the inspectors will recommend replacing just that gear.
- If you replaced the failed A/T for a shifting problem, the inspectors will focus their attention on solenoids, valve bodies, clutches, feed pipes, and bushings instead of on the gears. You can help speed the inspection process along by making sure you answer the yes/no questions on the order form as completely and accurately as possible.

For details on the entire A/T reman program, check out S/B 98-061, *Automatic Transmission In-Warranty Exchange Program*.

Avoiding Comebacks From A/T Contamination

Installing a reman A/T? Here are some important tips to keep in mind to ensure a first-time fix and to avoid any come-backs:

- If the vehicle has an ATF cooler, make sure you clean the cooler with the ATF Cooler Cleaner (P/N GHTTTCF6H). See S/B 89-022, *ATF Cooler Cleaner*, for details.
- If the reman A/T kit includes an in-line filter, don't forget to install it. If the vehicle already has an in-line filter from an earlier A/T replacement, then remove the existing filter, and install the new one.
- Spray the driveshaft splines with solvent and compressed air before installing them in the reman A/T. If the failed A/T had a speed sensor, make sure it's clean before you install it. Debris from the failed A/T can catch in the driveshaft splines or on the speed sensor and contaminate the reman A/T.
- If the reman A/T comes with a heater/cooler, make sure you install the reman A/T with that heater/cooler. *Never* install the heater/cooler from the failed A/T; you could contaminate the reman A/T.

Got DTC P0171? Check the Short-Term Fuel Trim

NOTE: This article applies to '03–04 Accords, '01–04 Civics, '02–04 CR-Vs, '03–04 Elements, '02–04 Odysseys, and '03–04 Pilots.

Got a vehicle in your shop that purrs like a kitten but it sets a DTC P0171 (fuel system too lean)? Check the short-term fuel trim (**ST FUEL TRIM B1**). If the value reads higher than **1.05**, then check the **MAP SENSOR** value with the engine turned off and the ignition switch turned to ON (II).

- If the **MAP SENSOR** and **BARO SENSOR** values match, the MAP sensor is working OK. Do the normal troubleshooting for DTC P0171.
- If the **MAP SENSOR** and **BARO SENSOR** values don't match, install a known-good MAP sensor, and retest. If the sensor values now match, clear the DTC, and make sure the **ST FUEL TRIM B1** value is normal (it reads about **1.0**).

Flat PAX System Tire? Replace the *Entire* Assembly

In last month's issue of *ServiceNews*, we told you about PAX system tires on '05 Odyssey Touring models and what to do if a customer gets a flat (see the article "Repairing PAX System Tires").

Something we need to make very clear: If a customer comes into your store with a flat PAX tire, you *must* replace the PAX tire/wheel assembly. *This is official Honda policy.* Don't try to fix the tire or subcontract the work out to another facility.

You'll find the official policy for PAX system tires on the *i*N. From the main menu, click on **PARTS**, **Parts Catalog**, **Tire Application Guide**, and then **PAX TIRE WARRANTY**.

Information No Longer Valid

TPMS Control Unit Won't Memorize Sensor IDs

NOTE: This article applies to '05 Odysseys and '05 Pilots.

Using the HDS to teach the Tire Pressure Monitoring System (TPMS) control unit the tire pressure sensor IDs can be a real pain at times. It's not uncommon that the control unit fails to memorize one or more of the sensor IDs during the learning process, causing TPMS DTC(s) to set. If this happens, the HDS tells you to raise the vehicle and begin a rather time-consuming process to make things right.

Fortunately, there's an easier way to handle this. First, clear the DTC(s) with the HDS. Then, with help from someone in your shop, start the learning process while driving the vehicle under **10 mph**. The TPMS control unit should learn all four sensor IDs.

If all four sensors IDs are learned, you're done. If one or more of the sensor IDs aren't learned, then press on with normal troubleshooting.

Check Camshaft Timing for DTC P0172

Are you getting a DTC P0172 (fuel system too rich) after replacing the timing belt, the auto-tensioner, or the water pump? The camshaft timing could be off. Refer to the Engine Mechanical section of the appropriate S/M, and check the camshaft timing. If the timing is OK, then do the normal troubleshooting for DTC P0172.

Fastener Extractor Works On Stubborn T-30 Torx Bolts

Stubborn T-30 Torx bolts can make removing the driver's airbag from the steering wheel a little tricky. A tad too much muscle, and you can strip the head, or worse yet, snap it off.

The Honda Tool and Equipment Program has a 3/8-inch fastener extractor that lets you safely remove T-30 Torx bolts without stripping the heads. It also works great for removing T-30 Torx bolts where the heads are already stripped.

The extractor's shank fits into a 1/4-inch socket. The extractor's head is specially designed to get a solid grip on the outside of the bolt.

To order this tool, call the Honda Tool and Equipment Program at **888-424-6857**. Ask for Model No. BET712.

Removing Stripped or Broken T-30 Torx Bolts

Ever stripped or broken a T-30 Torx bolt trying to remove the driver's airbag from the steering wheel? It can put a real crimp in your day. Here are a few tips to make short work of this problem.

Removing a Stripped T-30 Torx Bolt

1. Make sure the steering wheel is in its straight ahead position. Then remove the ignition key, and turn the steering wheel clockwise until it locks.
2. Use a hammer to tap a 3/8-inch fastener extractor (Model No. BET712) onto the bolt head.
3. Attach a ratchet and extension with a 1/4-inch socket to the extractor's shank.
4. Slowly remove the bolt by turning it counterclockwise. Always turn in a counterclockwise direction; the extractor won't work unless you do.
5. If the other Torx bolt is stripped, repeat these steps, making sure you lock the steering wheel **180 degrees** in the other direction.

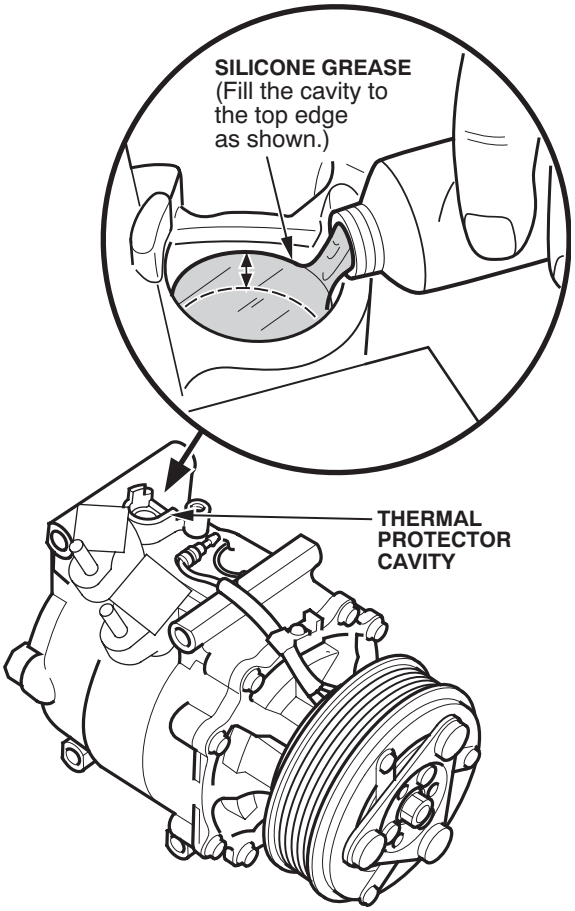
Removing a Broken T-30 Torx Bolt

1. Remove the airbag, and then remove the steering wheel. Clamp the steering wheel in a vice on a work bench.
2. Use a pencil/pinhead torch to heat the area around the broken bolt. This helps loosen the bolt.
3. Use small vise-grip pliers to grab the undamaged end of the bolt. Make sure you grab it on its non-threaded part so you don't mess up the threads. Heat the area until you can turn the bolt freely with the pliers, then turn off the torch.
4. Turn the bolt *clockwise* until the damaged end sticks out from the bolt hole. Now grab the damaged end with the pliers, and turn the bolt *counterclockwise* until it's free of the hole.
5. Run a 6.0mm x 1.0mm tap through the bolt hole.
6. Reinstall the steering wheel.

New Grease for Sanden A/C Comp Thermal Protector

There's a new silicone grease available for the Sanden A/C compressor thermal protector in '01–05 Civics. You'll find it listed as the TPS Silicone Kit (P/N 08798-9028, H/C 7963507).

When replacing the thermal protector, make sure you remove all of the old silicone grease and gunk from the compressor housing where the protector mounts. Pack the new silicone grease into the compressor housing cavity up to the edge of the lip.



When you install the new thermal protector, the silicone grease should completely fill up the cavity. If needed, use a clean shop towel to wipe off any excess grease.

New Software for HDS: Version 1.016.006

During the week of February 25, 2005, all Honda dealerships were sent a new CD containing HDS software version 1.016.006. This new CD sports a yellow label that reads "Honda Diagnostic System Installation Disk (VER 1.016.006), February 2005." Your system administrator should have this software already loaded onto the master server.

Here's some important info on 1.016.006:

- System coverage has been added for '06 Ridgelines.
- The SCS function is now on the main screen before you enter the VIN.
- The body electrical system function tests have been enhanced.
- It's now easier to install the HDS Pocket Tester.

Replacing Lost or Damaged Navigation System DVDs

NOTE: This article applies to '03–05 Accords, '00–05 Odysseys, and '03–05 Pilots.

If the navigation system DVD gets damaged or lost, a replacement DVD is just a phone call or a few keystrokes away. Here are two sources for replacement DVDs:

- **Honda DVD Navigation Software Order Line.** Just call **888-291-4675**, Monday thru Friday, 8:00 a.m to 4:00 p.m. PST.
- **Honda web site at *www.honda.com*.** From the main menu, click on **HONDA Automobiles**. Type **navi** in the **Type a question** box on the left side of the screen, and then click on **SEARCH**. Click on **right here** in the **Order the Satellite Navigation DVD** paragraph to bring up the online order form screen. From this screen, you can also view FAQs, coverage maps, and check on the status of your order.

XM Radio Gets Only Channels 0, 1, and 247

NOTE: This article applies to '04–05 Accords, '05 Elements, and '05 Odysseys with XM satellite radio.

If the XM satellite radio only gets channels 0, 1, and 247, check the account status. If the account has expired, the radio reverts to its preview mode. To check the account status, do this:

1. Turn on the radio, and select XM mode.
2. Tune the radio to XM channel 0, and write down the eight-digit XM radio ID number in the radio display.
3. Call XM at **800-852-9696**. When you call, have your dealer number, the VIN, and the XM radio ID number handy. When you hear the automated menu, select **1** (dealers and retailers). From the next menu, select **3** (technical support). Your call will be directly routed to an XM agent.
4. Ask the agent to check the account status. An active XM account needs a VIN, the XM radio ID number, and the customer's credit card number. If everything checks out OK, then ask the agent for a rapid demo activation. Rapid demo activations are turned on as soon as possible.
5. Park the vehicle outdoors where you have a clear view of the southern sky.
6. Tune the XM radio to channel 1. If after **2 hours**, you can't tune to XM channels 7, 9, 47, and 122, then replace the XM receiver. Don't forget to register the replacement receiver with XM. For details on how to do this, check out the article "Registering Replacement XM Receivers" in the January '05 issue of *ServiceNews*.

S/M Fix: TCS DTC 84, '03–05 Accord V6

You need to tweak the troubleshooting procedure for TCS DTC 84 (TCS pressure sensor neutral position) on page 19-44 of the 2003–05 Accord V6 Supplement. As written, the procedure doesn't tell you to do the TCS pressure sensor neutral position memorization after you clear the DTC. Mark up your copies of the S/M to look like this:

DTC 84: TCS Pressure Sensor Neutral Position

1. Clear the DTC (see page 19-15).
2. Test-drive the vehicle.
3. *Does the TCS indicator come on, and is DTC 84 indicated?*

   YES Replace the ABS/TCS modulator-control unit. ■

   NO The system is OK at this time. ■

2. Do the TCS pressure sensor neutral position memorization (see page 19-55).

New Instructions for Calling XM Radio

We've changed the instructions for calling XM to activate a factory-installed satellite radio or to register a replacement XM receiver. To get the fastest service, follow these steps:

1. Call **800-852-9696**. This is the same number you've been calling.
2. When you hear the automated menu, select **1** (dealers or retailers). From the next menu, select **3** (technical support). Your call will be directly routed to an XM agent.

   IMPORTANT! We strongly recommend you stop entering the Honda priority code **9466** when you first hear the automated menu. If you punch in this code, you're put into a queue that's been experiencing some unusually long wait times.

Door Glass Weatherstrip Damage From Tinting

Are owners of '03–05 Accords complaining of window noise and binding after having their windows tinted? The cause could be door glass weatherstrip damage by the window tinting guys.

To save time, window tinting shops often leave the door trim panels on. But with the trim panels left in place, there's just not enough room to apply the tint far enough down the glass to hide the end point of the film. To get around this problem, the tinting guys fold the door glass weatherstrip wipers under so the wipers are pointing straight down instead of straight up like they should. This lets them apply the film where they want it, but it permanently deforms the wipers, causing the windows to make noise and bind when you raise or lower them.

So what's the bottom line? Tell the window tinting guys they've got to remove the door trim panels, and they should *never* fold the door glass weatherstrip wipers under. Damage to the door glass weatherstrip from doing this isn't covered by warranty.

Never Play CDs With Adhesive labels

Honda audio units are built with some very tight clearances compared to aftermarket units. CDs with adhesive labels should *never* be played in these units. The label can curl up and jam the unit resulting in some expensive repairs.

If your customers burn their own CDs for vehicle use, they should mark them using a permanent marker or a specialized CD printer such as the Casio Disc Title Printer or the Epson Stylus Photo (R200, R300, or R800). Adhesive labels should *never* be used, no matter what type.

AUTOMOTIVE Youth Educational Systems YES ®

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